

Reply to Office Action dated January 10, 2008

**REMARKS**

Claims 1, 3-5, 9, 11, 13-14, 18, 21-23 and 32-38 are pending in this application. By this Amendment, claims 1, 9, 11, 13, 14, 18, 21 and 23 are amended and claims 2, 6, 10, 12, 15, 19, 24-26, 28 and 30 are canceled without prejudice or disclaimer. Various amendments are made for clarity and are unrelated to issues of patentability.

The Office Action rejects claims 26, 28 and 30 under 35 U.S.C. §112, first paragraph. By this Amendment, claims 26, 28 and 30 are canceled. Thus, the rejection is moot.

The Office Action rejects claims 1-3, 6, 9-15, 19, 21-22, 26, 28, 30 and 32-38 under 35 U.S.C. §103(a) over U.S. Patent Publication 2001/0004257 to Nitta et al. (hereafter Nitta) in view of U.S. Patent Publication 2004/0008176 to Nuimura and U.S. Patent Publication 2002/0080091 to Acharya et al. (hereafter Acharya). The Office Action also rejects claims 4-5, 18 and 23-25 under 35 U.S.C. §103(a) over Nitta in view of Nuimura, Acharya and U.S. Patent 5,977,934 to Wada et al. (hereafter Wada). The rejections are respectfully traversed with respect to the pending claims.

Independent claim 1 recites identifying an LCD refresh rate recorded in extended display identification data (EDID) of a memory provided in an LCD, and deriving a PWM frequency of an inverter adapted to control a brightness of the LCD, wherein the deriving is based on the identified LCD refresh rate. Independent claim 1 further recites driving the LCD in accordance with the derived PWM frequency of the inverter.

The applied references do not teach or suggest at least these features of independent claim 1. More specifically, the applied references do not teach or suggest the features relating to

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an LCD refresh rate. That is, the applied references do not teach or suggest deriving a PWM frequency of an inverter adapted to control a brightness of the LCD, wherein the deriving is based on the identified LCD refresh rate (recorded in an EDID of a memory provided in an LCD).

Nitta does not suggest the features relating to the LCD refresh rate. The Office Action relies on Nuimura for features relating to based on a frame frequency. However, the cited sections in Nuimura, such as paragraphs [0004], [0012], [0027], [0031] and [0034], do not teach or suggest deriving a PWM frequency based on an identified LCD refresh rate. Nuimura has no teaching or suggestion for the claimed LCD refresh rate or the use of an LCD refresh rate to derive a PWM frequency. Acharya and Wada do not teach or suggest these missing features of independent claim 1.

For at least these reasons, Nitta, Nuimura, Acharya and Wada do not teach or suggest all the features of independent claim 1. Thus, independent claim 1 defines patentable subject matter.

Independent claim 11 recites a memory recorded with extended display identification data (EDID) for an LCD, the memory provided in a lamp of the LCD or in the LCD. Independent claim 11 also recites an inverter that supplies a voltage to the LCD, and control means for controlling a PWM frequency of the inverter in accordance with an LCD refresh rate corresponding to information in the EDID, wherein the control means controls the PWM frequency based on the LCD refresh rate.

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For at least similar reasons as set forth above, the applied references do not teach or suggest all the features of independent claim 11. That is, Nitta, Nuimura, Acharya and Wada do not teach or suggest control means for controlling a PWM frequency of an inverter in accordance with an LCD refresh rate (corresponding to information in the EDID), wherein the control means controls the PWM frequency based on the LCD refresh rate. Thus, independent claim 11 defines patentable subject matter.

Independent claim 21 recites a memory recorded with extended display identification data (EDID) for a liquid crystal display (LCD) of the display. Independent claim 21 also recites an inverter that supplies a voltage to the LCD, and a controller coupled to the main processor that controls a pulse width modulated (PWM) frequency of the inverter based on an LCD refresh rate included in the EDID, wherein the controller controls the PWM frequency based on the LCD refresh rate.

For at least similar reasons as set forth above, the applied references do not teach or suggest all the features of independent claim 21. That is, Nitta, Nuimura, Acharya and Wada do not teach or suggest a controller coupled to the main processor that controls a pulse width modulation (PWM) frequency of the inverter based on an LCD refresh rate included in the EDID, wherein the controller controls the PWM frequency based on the LCD refresh rate. Thus, independent claim 21 defines patentable subject matter.

For at least the reasons set forth above, each of independent claims 1, 11 and 21 defines patentable subject matter. Each of the dependent claims depends from one of the independent claims and therefore defines patentable subject matter at least for this reason. In addition, the

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dependent claims recite features that further and independently distinguish over the applied references.

### **CONCLUSION**

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 1, 3-5, 9, 11, 13-14, 18, 21-23 and 32-38 are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,  
KED & ASSOCIATES, LLP



David C. Oren  
Registration No. 38,694

P.O. Box 221200  
Chantilly, Virginia 20153-1200  
(703) 766-3777 DCO/kah

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**Please direct all correspondence to Customer Number 34610**